## Remarks/Arguments

Following the Board of Patent Appeals and Interferences' reversal of the various rejections of claims 1 - 7, 9 - 16, and 25 - 34 as unpatentable over Campbell (U.S. Pat. No. 1,600,396), Stone (U.S. Pat. No. 5,551,938), Stokes (U.S. Pat. No. 1,880,288) and Lang (U.S. Pat. No. 5,147,480), the Examiner has reopened prosecution and entered rejections on new grounds, which will be discussed individually below.

Upon entry of the present Amendment, claims 1, 4-7, and 25 will have been amended, claims 8, 16-24, and 34-39 will have been canceled, and claims 40-76 will have been added.

## 1. Rejections Under 35 U.S.C. § 102(b) based on Claff

Claims 1, 3-6, 11-13, 16, 25, and 29-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by Claff (U.S. Patent No. 2,008,608). Applicant traverses this rejection.

In the method disclosed by Claff, strips of adhesive tape 2 are adhered to a web of box-board material. Portion 3 of the tape covers the box side walls while portion 4 of the tape covers a portion of the box's bottom (p. 1, col. 2, lines 29 to 41). After the tape is applied, the web is scored longitudinally at 6 and transversely at 7 to define the bottom portion 8, side flaps 9 and end flaps 10 (p. 1, col. 2, lines 44 to 48). As Claff shows in Figs. 4 and 5, when the blank is folded at the score lines into a box, the tape 2 extends around the thus-formed corner on the side of the web opposite the score line. This construction reinforces the corners of the box against tearing (p. 1, col. 1, lines 37 and 38; p. 2, col. 1, lines 9 to 21).

By contrast, in the method disclosed by Applicant, the ribbons 21 of reinforcing material may cover substantially all of a panel portion between fold lines 27, but do not cover the longitudinally extending fold lines 27 themselves. Thus as stated at page 18, lines 1 to 7:

... some of the fold lines 27 may be located adjacent or along an edge of a reinforcing ribbon 21. In such cases, these fold lines

preferably are carefully located a predetermined short distance from the edge of the ribbon so that the ribbon will not adversely affect or interfere with the folding of the paperboard along the fold lines.

This construction is shown in, for example, Figs. 3 to 5, where the ribbons 62 cover substantially all of panel portions 61, but their inboard edges 65 are spaced a predetermined short distance from fold lines 53 (page 25, lines 7 to 23). As disclosed at page 26, lines 1 to 9, it has been found that this predetermined short distance (e.g., about 0.030 inches) "allows unimpeded folding of a carton blank along the fold line while having little or no effect on the structural reinforcement provided by the reinforcing ribbon."

A further example of a carton produced by Applicant's disclosed method is shown in Fig. 8, where ribbons 123 cover substantially all of side wall panels 124, with their edges spaced a short distance from fold lines 125.

Thus, the reinforced carton blanks made by Applicant's method are reinforced in an entirely different manner than the blanks of Claff. In order to more clearly distinguish Applicant's claimed method from Claff, independent claims 1 and 25, as well as dependent claims 4 to 7, have been amended to recite that the at least one ribbon of reinforcing material overlies or is positioned on, and is adhered to, "substantially all of, but not beyond," a panel portion of the web. The addition of "but not beyond" to the claims is supported by the figures and specification and clearly provides that the claimed ribbon overlies, or is positioned on, substantially all of a selected panel portion, but does not extend beyond that selected panel portion into an adjacent panel portion. This is in contrast to the method disclosed by Claff, in which ribbons (tapes) 2 extend beyond panel portions 9, across score line locations 6, into the bottom panel portion 8 of the web. Moreover, it would not have been obvious to confine Claff's tapes 2 to panel portions 9, since, as discussed above, Claff teaches that the purpose of his

method is to reinforce the corners of the box. This purpose would not be achieved if tapes 2 did not cover the locations of score lines 6 in Claff.

Further, with regard to claims 6 and 33, Claff fails to disclose applying and adhering at least one <u>ribbon</u> of reinforcing material atop another ribbon, as claimed. Page 2, col. 2, line 38 et seq. of Claff, a section referenced by the Examiner, discloses applying a web 14 of finishing paper that is not only wider than tapes 2, but also wider than web 1. This additional, wider web does not constitute "a second ribbon of reinforcing material" as recited in claim 6, or "at least one of the ribbons of reinforcing material" as recited in claim 33, because claim 4, the parent of claim 6, recites "each of the ribbons of reinforcing material being positioned to overlie substantially all of, but not beyond, a selected panel portion of the web," and claim 30, the parent of claim 33, recites "each ribbon having a width less than the width of noncorrugated paperboard."

In view of the above-noted differences between the rejected claims and the method disclosed by Claff, the claims are not anticipated by Claff and the rejection should be withdrawn.

## 2. Rejections Under 35 U.S.C. § 102(b) based on Walsh

Claims 1-7, 11-16, and 34 were rejected under 35 U.S.C. §102(b) as anticipated by Walsh (U.S. Patent No. 5,108,355). Applicant traverses this rejection.

The method disclosed by Walsh is fundamentally different from that claimed by Applicant for at least the reasons that (1) Walsh fails to disclose adhering a "ribbon" of reinforcing material and (2) the method of Walsh applies to pre-cut blanks, not to a continuous web.

Walsh fails to disclose adhering a ribbon of reinforcing material as presently claimed.

Walsh discloses a "batch" method in which carton blanks 10 are first cut, and then a precut

reinforcing insert panel 60 is adhered to each carton blank. By contrast, Applicant's method is a "continuous" method, in which one or more ribbons of reinforcing material are adhered to a web of paperboard, <u>prior to</u> cutting the carton blanks from the web. The process disclosed by Walsh exemplifies a need which Applicant's invention is intended to fill. Walsh requires a specialized machine, labeled in his figures as 80 or 120, to attach the reinforcing panels, whereas Applicant's method advantageously can be performed on traditional machinery. As Applicant discloses at page 7, line 22 to page 8, line 2:

A related need exists for an efficient and cost effective method of making such paperboard cartons that uses traditional paperboard carton fabrication machinery and that does not substantially increase material costs associated with the fabrication process.

In contrast to Walsh, presently amended claim 1 requires "progressively applying and adhering at least one <u>ribbon</u> of reinforcing material to the advancing web of noncorrugated paperboard" (emphasis added). As disclosed by Applicant, ribbons 21 of reinforcing material are elongated strips which are fed from rolls 19; this is consistent with the dictionary definition of a ribbon as "1. a woven strip or band of fine material, as silk, rayon, etc., finished off at the edges, and ranging in width, used for ornament, tying, etc. . . . 3. anything <u>resembling or suggesting a ribbon</u> or woven band." The Examiner identifies element 60 of Walsh as a "ribbon," but Applicant submits that this is far beyond the broadest reasonable interpretation of the term. Walsh's element 60 is an insert panel which, as shown in the patent, is simply a rectangular panel sized to fit in the carton blank 10. Panel 60 does not resemble anything that one of ordinary skill in the art would normally consider to be a ribbon, and neither corresponds in shape to the ribbons disclosed by Applicant nor falls within the ordinary meaning of a "ribbon" as defined in the dictionary, supra.

The American College Dictionary, p. 1043 (1961) (copy attached).

Walsh applies to pre-cut blanks, not to a continuous web. Claim 1 recites that the ribbon of reinforcing material is adhered "to the advancing web of noncorrugated paperboard," and "cutting the web of noncorrugated paperboard to form carton blanks having panels." Walsh does not meet these limitations. In the Walsh method, the so-called "ribbon" 60 is not adhered to a web, but to a precut carton blank 10. Even assuming (which Walsh does not disclose) that the carton blank 10 of Walsh was cut from a web of paperboard, the method disclosed by Walsh is contrary to that recited in claim 1, because in the claimed method the ribbon is adhered to the web <u>prior to</u> carton blanks being cut from the web, rather than (as in Walsh) adhering a so-called "ribbon" to a carton blank that has already been cut.

In view of these differences between the method recited in claim 1 and the method disclosed by Walsh, Walsh does not anticipate claim 1 and the claims dependent thereon.

# 3. Rejections Under 35 U.S.C. § 103(a) Based on Claff or Walsh in View of Lang

Claims 9-10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Claff or Walsh in view of Lang. Applicant traverses this rejection.

The Examiner cites Lang as evidence of the obviousness of printing on reinforcing strips. However, whatever may be the merits of this rejection, Lang fails to make up for the deficiencies noted in the foregoing discussion of the rejections of parent claim 1 as unpatentable over Claff or Walsh. Accordingly, claims 9 and 10 are patentable on their own merits and as inheriting allowable subject matter from claim 1.

#### 4. Rejections Under 35 U.S.C. § 103(a) Based on Claff in view of Walsh

Claims 26-28 and 30-33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Claff in view of Walsh. Applicant traverses this rejection.

With respect to claims 26-28, the Examiner asserts that, in view of Walsh, it would have been obvious to use paperboard reinforcing material in the method of Claff. While Applicant does not agree with this assertion, further discussion of this rejection is unnecessary since the proposed combination fails to overcome the deficiencies discussed above with regard to the rejection of parent claim 25 as unpatentable over Claff. Consequently, claims 26-28 are allowable on their own merits and as inheriting allowable subject matter from claim 25.

With respect to claims 30-33, the Examiner asserts that it would have been obvious in view of Walsh to position reinforcing material in the Claff method "fully within the panel boundaries defined by opposing fold lines." This rejection is respectfully traversed. Walsh would not suggest to one of ordinary skill in the art positioning Claff's reinforcing material 2 entirely within the panel boundaries defined by fold (score) lines 6, because, as discussed above, the purpose of the Claff method is to reinforce the corners of the box. Positioning Claff's reinforcing material 2 so that it did not cover score lines 6 would defeat this purpose, since the corners (e.g., at score lines 6) would not be reinforced if score lines 6 were not covered by reinforcing material 2. Moreover, Walsh shows that the edges 65, 67 of the insert panel 60 are not aligned with the edges 15, 17 of the carton blank 10; see Figs. 2 and 4. This construction shown in Walsh would not be accomplished by the Claff method. When the carton blank of Claff is cut from web 1, it is cut along line 13, which passes through the web and the attached reinforcing material 2 (see Fig. 1 and p. 1, col. 2, line 55 to p. 2, col. 1, line 6). There is no disclosure in Claff, nor is it apparent, how one could cut the blank from the web so that the ends of the reinforcing tape 2 would not be aligned with the ends of the blank at cut line 13. Since modifying the Claff method in view of Walsh would negate the purpose of the Claff method, and in any event could not be accomplished by the Claff method, the rejection of claims 30-33 should be withdrawn.

# 5. New Claims 40-76

Claims 40-76, added by the present amendment, include three independent claims, claims 40, 59, and 60, each of which is patentable over the prior art of record in this case. Each of these independent claims is drawn to a method of making carton blanks in which a web of noncorrugated paperboard is advanced along a path, at least one side of the web is scored to form longitudinally extending fold lines, and at least one ribbon of reinforcing material is applied and adhered to the web, the ribbon having a width less than the width of the web and being positioned to not overlie any of the longitudinally extending fold lines. The principal differences between these claims are:

- a. <u>Claim 40</u> recites that a plurality of reinforcing ribbons are adhered to a side of the web that is scored.
- b. <u>Claim 59</u> recites that at least one ribbon having a longitudinally extending fold line is attached to the web between the fold line and one edge of the ribbon, where the ribbon can be folded in a direction away from the web. Such construction is shown, for example, by ribbon 97 in Fig. 6h and by ribbon 126 in Fig. 8.
- c. <u>Claim 60</u> recites that at least one ribbon is adhered to a side of the web which is scored, and is adhered to the web substantially across the ribbon's entire width.

# Conclusion

In view of the foregoing, the claims currently pending in this application are patentable over the prior art of record. In view of the fact that this application has now been pending over five years, it is requested that it be made special and promptly passed to issue.

Respectfully Submitted,

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